09/886,271

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NEWS 8 OCT 28 BIOSIS file segment of TOXCENTER reloaded and enhanced
NEWS 9 NOV 24 MSDS-CCOHS file reloaded
NEWS 10 DEC 08 CABA reloaded with left truncation
                IMS file names changed
NEWS 11 DEC 08
NEWS 12 DEC 09
                Experimental property data collected by CAS now available
                 in REGISTRY
NEWS 13 DEC 09
                STN Entry Date available for display in REGISTRY and CA/CAplus
NEWS 14 DEC 17
                DGENE: Two new display fields added
        DEC 18
NEWS 15
                BIOTECHNO no longer updated
NEWS 16 DEC 19
                CROPU no longer updated; subscriber discount no longer
                 available
NEWS 17 DEC 22
                Additional INPI reactions and pre-1907 documents added to CAS
                 databases
NEWS 18 DEC 22
                IFIPAT/IFIUDB/IFICDB reloaded with new data and search fields
        DEC 22
NEWS 19
                ABI-INFORM now available on STN
NEWS 20
        JAN 27
                Source of Registration (SR) information in REGISTRY updated
                 and searchable
NEWS 21
        JAN 27
                A new search aid, the Company Name Thesaurus, available in
                CA/CAplus
NEWS 22
        FEB 05
                German (DE) application and patent publication number format
                changes
NEWS 23
        MAR 03
                MEDLINE and LMEDLINE reloaded
NEWS 24
        MAR 03
                MEDLINE file segment of TOXCENTER reloaded
NEWS 25
        MAR 03
                FRANCEPAT now available on STN
NEWS EXPRESS
             MARCH 5 CURRENT WINDOWS VERSION IS V7.00A, CURRENT
             MACINTOSH VERSION IS V6.0b(ENG) AND V6.0Jb(JP),
             AND CURRENT DISCOVER FILE IS DATED 3 MARCH 2004
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             CAS World Wide Web Site (general information)
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FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004

=> file medline, biosis, biobusiness, wpids, fsta, jicst, embase, dgene, uspatful COST IN U.S. DOLLARS SINCE FILE TOTAL

ENTRY SESSION

FULL ESTIMATED COST

0.21 0.21

FILE 'MEDLINE' ENTERED AT 13:11:13 ON 12 MAR 2004

FILE 'BIOSIS' ENTERED AT 13:11:13 ON 12 MAR 2004 COPYRIGHT (C) 2004 BIOLOGICAL ABSTRACTS INC.(R)

FILE 'BIOBUSINESS' ENTERED AT 13:11:13 ON 12 MAR 2004 COPYRIGHT (C) 2004 Biological Abstracts, Inc. (BIOSIS)

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FILE 'USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004 CA INDEXING COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)

=> s protein marker

L1 2389 PROTEIN MARKER

=> s obesity

L2 368909 OBESITY

=> s hypertension

L3 845017 HYPERTENSION

=> s diabetes

L4 1028410 DIABETES

=> s osteoarthritis

L5 270109 OSTEOARTHRITIS

=> s osteoporosis

L6 232226 OSTEOPOROSIS

=> s l1 an dl2

MISSING OPERATOR L1 AN

The search profile that was entered contains terms or nested terms that are not separated by a logical operator.

=> s 11 and 12

L7 218 L1 AND L2

=> s 11 () 13 0 L1 (W) L3 L8=> s l1 and l3 L9 267 L1 AND L3 => s 11 and 14 308 L1 AND L4 T₁10 => s l1 and l5 L11226 L1 AND L5 => s l1 and l6 209 L1 AND L6 L12 => s 17 and non-genetic 8 L7 AND NON-GENETIC => d l13 ti abs ibib tot

-, 4 110 01 000 1010 000

L13 ANSWER 1 OF 8 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

New non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

AN 2002-362307 [39] WPIDS

AB WO 200222165 A UPAB: 20020621

NOVELTY - **Non-genetic** based protein disease markers for **obesity**, osteoporosis, diabetes, osteoathritis and hypertension, are new.

DETAILED DESCRIPTION - Non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, are new, where markers for obesity (n=34), osteoporosis (n=20), diabetes (n=9), osteoathritis (n=1) and hypertension (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

- (1) determining a disease state of a subject suspected of having **obesity**, osteoporosis, diabetes, osteoathritis or hypertension comprising:
 - (a) obtaining a sample containing protein;
- (b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and
- (c) comparing with levels in controls from disease-free subjects/control standards;
- (2) binding reagents specific for the proteins, optionally bound to a detectable label;
- (3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, diabetes, osteoathritis or hypertension (and optionally being treated with pharmaceuticals);
- (4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;
- (5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;
- (6) generating an index marker for a particular physiological state comprising:
- (a) determining protein markers that differ between samples from a subject with a disease state and a control sample;
 - (b) selecting two or more of the markers;

- (c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;
- (7) index markers comprising two or more protein markers determined by (6);
- (8) cloning a gene encoding a **protein marker** comprising:
 - (a) determining a partial amino acid sequence of the protein;
- (b) deducing a nucleotide sequence for a gene encoding the protein; and
- (c) isolating or synthesizing a gene encoding the nucleotide sequence; and
- (9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, diabetes, osteoathritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

ACCESSION NUMBER:

2002-362307 [39] WPIDS

DOC. NO. CPI:

C2002-102544

TITLE:

New non-genetic based protein disease

markers for obesity, osteoporosis, diabetes,

osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen

for therapeutic compounds.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR,

J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S):

(ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I)

PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N)

LARGE SCALE PROTEOMICS CORP

COUNTRY COUNT:

97

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2002022165 A1 20020321 (200239)* EN 63

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO

RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

US 2002072492 A1 20020613 (200243) AU 2001088973 A 20020326 (200251)

APPLICATION DETAILS:

PATENT NO KIND APPLICATION DATE

WO 2002022165 A1 US 2002072492 A1 CIP of

WO 2001-US28268 20010912 US 2000-660242 20000912 US 2001-886271 20010622 AU 2001-88973 20010912

AU 2001088973 A

FILING DETAILS:

PATENT NO KIND PATENT NO

AU 2001088973 A Based on WO 2002022165

20010622; US 2000-660242 PRIORITY APPLN. INFO: US 2001-886271

20000912

L13 ANSWER 2 OF 8 USPATFULL on STN

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, TI49937, 49931 and 49933 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated AΒ 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2004:12981 USPATFULL

TITLE:

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses

therefor

INVENTOR(S):

Curtis, Rory A. J., Ashland, MA, UNITED STATES Logan, Thomas Joseph, Springfield, PA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Meyers, Rachel E., Newton, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES Rudolph-Owen, Laura A., Medford, MA, UNITED STATES Chun, Miyoung, Belmont, MA, UNITED STATES

Tsai, Fong-Ying, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER KIND DATE _____

PATENT INFORMATION: APPLICATION INFO.:

RELATED APPLN. INFO.:

US 2004009501 A1 20040115 US 2003-377072 A1 20030227 (10)

Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED

Continuation-in-part of Ser. No. US 2001-935291, filed on 21 Aug 2001, ABANDONED

	NUMBER	DATE	
PRIORITY INFORMATION: DOCUMENT TYPE:	US 2000-215370P US 2000-187455P US 2000-199801P US 2000-205508P US 2000-213688P US 2000-218675P US 2000-250932P US 2000-226504P Utility	20000629 20000307 20000426 20000519 20000623 20000717 20001130 20000821	(60) (60) (60) (60) (60)
FILE SEGMENT: LEGAL REPRESENTATIVE: NUMBER OF CLAIMS: EXEMPLARY CLAIM: LINE COUNT: CAS INDEXING IS AVAILAB!	19 1 16123	-	treet, Cambridge, MA, 02139
67067, 62092, 809	12, 53659, 57250, 99, 46455, 54414,	53763, 6707	8, 32146, 57259, 67118, 6, 67102, 44181, 67084FL,
AB The invention prospersion was a state of the second animals in which state of the	ovides isolated nucleons, 559, 57250, 63760, 55, 54414, 53763, 695FL, 57255, and 57 ovides are invention also proposed at the second of the se	cleic acids 49938, 321 67076, 6710 7255alt nuc uding sugar nsporters, rovides ant 57259, 671 44181, 670 olecules, h duced, and 3659, 57250, tion still 49938, 321 67076, 6710 7255alt pol nd anti-385 67067, 620 L, 67084ALT d therapeut	isense nucleic acid staining 38594, 57312, 18, 67067, 62092, 8099, 84FL, 67084ALT, FBH58295FL, sost cells into which the non-human transgenic , 63760, 49938, 32146, 4, 53763, 67076, 67102, and 57255alt gene has been further provides isolated 46, 57259, 67118, 67067, 2, 44181, 67084FL, ypeptides, fusion 94, 57312, 53659, 57250, 92, 8099, 46455, 54414, 7, FBH58295FL, 57255, and ic methods utilizing

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 2003:207317 USPATFULL Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, ACCESSION NUMBER: TITLE: 57255, and 57255alt molecules and uses therefor Curtis, Rory A.J., Framingham, MA, UNITED STATES INVENTOR(S): Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES Meyers, Rachel E., Newton, MA, UNITED STATES Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S. PATENT ASSIGNEE(S):

compositions of the invention are also provided.

corporation)

NUMBER KIND DATE US 2003143675 A1 20030731 US 2002-154419 A1 20020522 (10) PATENT INFORMATION:

APPLICATION INFO.:

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2001-858194, filed on 14 May 2001, PENDING Continuation-in-part of Ser. No. US 2001-895811, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-919781, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-957664, filed on 19 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-964295, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-972724, filed on 5 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-2769, filed on 14 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-24623, filed on 17 Dec 2001, PENDING

Continuation-in-part of Ser. No. US 2002-55025, filed

on 22 Jan 2002, PENDING

NUMBER DATE ______

PRIORITY INFORMATION:

US 2000-204211P 20000512 (60) US 2000-215376P 20000629 (60) US 2000-221769P 20000731 (60) US 2000-233790P 20000919 (60) US 2000-235107P 20000925 (60)

US 2000-238336P 20001005 (60) US 2000-248364P 20001114 (60) 20001115 (60) US 2000-248878P

20001215 (60) 20001218 (60) US 2000-256240P US 2000-256588P 20001221 (60) US 2000-258028P

US 2001-263169P 20010122 (60) US 2001-263169P 20010122 (60)

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Intellectual Property Group, MILLENNIUM

PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,

02139

NUMBER OF CLAIMS: 23 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 252 Drawing Page(s)

LINE COUNT: 45817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 8 USPATFULL on STN

68723, sodium/glucose cotransporter family members and uses therefor TТ The invention provides isolated nucleic acids molecules, designated AΒ 68723 nucleic acid molecules, which encode novel sodium/glucose cotransporter family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 68723 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 68723 gene has been introduced or disrupted. The invention still further provides isolated 68723 proteins, fusion proteins, antigenic peptides and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2003:78533 USPATFULL ACCESSION NUMBER:

TITLE: 68723, sodium/glucose cotransporter family members and

uses therefor

Curtis, Rory A.J., Framingham, MA, UNITED STATES INVENTOR(S):

Chen, Hong, Newton, MA, UNITED STATES

Millennium Pharmaceuticals, Inc. (U.S. corporation) PATENT ASSIGNEE(S):

NUMBER KIND DATE

PATENT INFORMATION: US 2003054453 A1 20030320 APPLICATION INFO.: US 2002-119988 A1 20020410 (10)

NUMBER DATE ______

PRIORITY INFORMATION:

US 2001-282764P 20010410 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75

Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

NUMBER OF DRAWINGS: 3 Drawing Page(s)

LINE COUNT:

6315

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 5 OF 8 USPATFULL on STN

18607, a novel human calcium channel ΤI

The invention provides isolated nucleic acids molecules, designated TLCC ΑB nucleic acid molecules, which encode novel TRP-like calcium channel molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing TLCC nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a TLCC gene has been introduced or disrupted. The invention still further provides isolated TLCC proteins, fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:258807 USPATFULL

TITLE:

18607, a novel human calcium channel

INVENTOR(S):

Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Curtis, Rory A.J., Southborough, MA, UNITED STATES

Lora, Jose M., Arlington, MA, UNITED STATES

NUMBER KIND DATE -----

PATENT INFORMATION: APPLICATION INFO.:

US 2002142377 A1 20021003 US 2001-789481 A1 20010220 (9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No. US 2000-583373, filed on 31 May 2000, PENDING

Continuation-in-part of Ser. No. US 2000-510706, filed on 22 Feb 2000, PENDING

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS:

44

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

26 Drawing Page(s)

LINE COUNT:

5230

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 6 OF 8 USPATFULL on STN

TI25869, a novel human carboxylesterase and uses thereof

AΒ The invention provides isolated nucleic acid molecules, designated COE-1 nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and

nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antigenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:148643 USPATFULL

TITLE: 25869, a novel human carboxylesterase and uses thereof

INVENTOR(S): Curtis, Rory A.J., Southborough, MA, UNITED STATES

Logan, Thomas Joseph, Needham, MA, UNITED STATES

NUMBER DATE

PRIORITY INFORMATION: US 2000-215370P 20000629 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 32 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 9 Drawing Page(s)

LINE COUNT: 5139

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 7 OF 8 USPATFULL on STN

TI Non-genetic based protein disease markers

AB Protein disease markers for **obesity**, osteoporosis, diabetes, osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL

TITLE: Non-genetic based protein disease

markers

INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES

Pieper, Rembert, Washington, DC, UNITED STATES Taylor, John, JR., Clayton, NC, UNITED STATES Steiner, Sandra, Gaithersburg, MD, UNITED STATES Anderson, N. Leigh, Washington, DC, UNITED STATES

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-660242, filed

on 12 Sep 2000, PENDING

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300

19th Street, N.W., Washington, DC, 20036

NUMBER OF CLAIMS: 55 EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 10 Drawing Page(s)

LINE COUNT: 1425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L13 ANSWER 8 OF 8 USPATFULL on STN

Methods and compositions for elucidating relative protein expression ΤI levels in cells

The present invention relates generally to methods and compositions for ΑB the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

2001:188396 USPATFULL ACCESSION NUMBER:

Methods and compositions for elucidating relative TITLE:

protein expression levels in cells

Link, Charles J., Des Moines, IA, United States INVENTOR(S):

Seregina, Tatiana, Ames, IA, United States Vahanian, Nicholas N., Ames, IA, United States Higginbotham, James N., Ames, IA, United States

Ramsey, W. Jay, Ames, IA, United States Powers, Bradley J., Ames, IA, United States Shulka, Sachet A., Ames, IA, United States Young, Won Bin, Ames, IA, United States

NUMBER	KIND	DATE	
	-		
US 2001034028	A1	20011025	
US 2001-811842	A1	20010319	(9)

NUMBER DATE _____

US 2000-190678P 20000320 (60) US 2000-198722P 20000420 (60) PRIORITY INFORMATION:

DOCUMENT TYPE: Utility FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200,

801 GRAND AVENUE, DES MOINES, IA, 50309-2721

NUMBER OF CLAIMS: 52 EXEMPLARY CLAIM: 1

PATENT INFORMATION: APPLICATION INFO.:

NUMBER OF DRAWINGS: 23 Drawing Page(s)

LINE COUNT: 2290

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

L5

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE, DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

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2389 S PROTEIN MARKER
T<sub>1</sub>1
```

L2368909 S OBESITY

L3 845017 S HYPERTENSION

L41028410 S DIABETES

270109 S OSTEOARTHRITIS

232226 S OSTEOPOROSIS L6

218 S L1 AND L2 L7

 $^{\rm L8}$ 0 S L1 () L3

267 S L1 AND L3 L9

308 S L1 AND L4 L10

226 S L1 AND L5 L11

209 S L1 AND L6 L12

L13 8 S L7 AND NON-GENETIC

=> s 19 and NON-GENETIC

1 FILES SEARCHED...

9 L9 AND NON-GENETIC

- L14 ANSWER 1 OF 9 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN
- TI New non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

AN 2002-362307 [39] WPIDS

AB WO 200222165 A UPAB: 20020621

NOVELTY - Non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, are new.

DETAILED DESCRIPTION - **Non-genetic** based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and **hypertension**, are new, where markers for obesity (n=34), osteoporosis (n=20), diabetes (n=9), osteoathritis (n=1) and **hypertension** (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

- (1) determining a disease state of a subject suspected of having obesity, osteoporosis, diabetes, osteoathritis or **hypertension** comprising:
 - (a) obtaining a sample containing protein;
- (b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and
- (c) comparing with levels in controls from disease-free subjects/control standards;
- (2) binding reagents specific for the proteins, optionally bound to a detectable label;
- (3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, diabetes, osteoathritis or hypertension (and optionally being treated with pharmaceuticals);
- (4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;
- (5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;
- (6) generating an index marker for a particular physiological state comprising:
- (a) determining protein markers that differ between samples from a subject with a disease state and a control sample;
 - (b) selecting two or more of the markers;
- (c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;
- (7) index markers comprising two or more protein markers determined
 by (6);
- (8) cloning a gene encoding a protein marker comprising:
 - (a) determining a partial amino acid sequence of the protein;
- (b) deducing a nucleotide sequence for a gene encoding the protein; and
- (c) isolating or synthesizing a gene encoding the nucleotide sequence; and
- (9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, diabetes, osteoathritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10

ACCESSION NUMBER:

2002-362307 [39]

DOC. NO. CPI:

C2002-102544

TITLE:

New non-genetic based protein disease

markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, useful in

diagnosis and monitoring of treatment for these diseases

and to screen for therapeutic compounds.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR,

J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S):

(ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I)

PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N)

LARGE SCALE PROTEOMICS CORP

COUNTRY COUNT:

97

PATENT INFORMATION:

PATENT	NO	KIND	DATE	WEEK	LA	PG

WO 2002022165 A1 20020321 (200239)* EN 63

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

US 2002072492 A1 20020613 (200243) AU 2001088973 A 20020326 (200251)

APPLICATION DETAILS:

PATENT NO K	IND	APPLICATION	DATE
WO 2002022165 US 2002072492		WO 2001-US28268 US 2000-660242 US 2001-886271	20010912 20000912 20010622
AU 2001088973	A	AU 2001-88973	20010022

FILING DETAILS:

PATENT NO KIND PATENT NO -----AU 2001088973 A Based on WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242 20000912

L14 ANSWER 2 OF 9 USPATFULL on STN TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated AΒ 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2004:12981 USPATFULL

TITLE:

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses

therefor

INVENTOR (S):

Curtis, Rory A. J., Ashland, MA, UNITED STATES Logan, Thomas Joseph, Springfield, PA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED

STATES

Meyers, Rachel E., Newton, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES Rudolph-Owen, Laura A., Medford, MA, UNITED STATES Chun, Miyoung, Belmont, MA, UNITED STATES

Tsai, Fong-Ying, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2004009501 A1 20040115 US 2003-377072 A1 20030227 (10)

Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed

on 21 Aug 2001, ABANDONED

			NUMBER	DATE	
PRIORITY	INFORMATION:	US	2000-215370P	20000629	(60)
	•	US	2000-187455P	20000307	(60)
		US	2000-199801P	20000426	(60)
		US	2000-205508P	20000519	(60)
		US	2000-213688P	20000623	(60)
		US	2000-218675P	20000717	(60)
		US	2000-250932P	20001130	(60)
		US	2000-226504P	20000821	(60)
DOCUMENT	TYPE:	Ut:	ility		

APPLICATION

FILE SEGMENT:

LEGAL REPRESENTATIVE: NUMBER OF CLAIMS:

Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139

19

EXEMPLARY CLAIM:

1

LINE COUNT:

16123

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 3 OF 9 USPATFULL on STN

TI Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or disrupted. The invention still further provides isolated 27875, 22025, 27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2004:7776 USPATFULL

TITLE:

Novel 27875, 22025 ,27420, 17906, 16319, 55092 and

10218 molecules and uses therefor

INVENTOR(S):

Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED

STATES

White, David, Braintree, MA, UNITED STATES
Robison, Keith E., Wilmington, MA, UNITED STATES
MacBeth, Kyle J., Boston, MA, UNITED STATES
Carroll, Joseph M., Cambridge, MA, UNITED STATES
Cook, William James, Hanover, NH, UNITED STATES
Meyers, Rachel E., Newton, MA, UNITED STATES
Chun, Miyoung, Belmont, MA, UNITED STATES
Williamson, Mark J., Saugus, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER							K	Ι	N	D]	D	A	Т	Ε												
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PATENT INFORMATION: APPLICATION INFO.:

US 2004006016 A1 20040108 US 2003-386414 A1 20030311

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 1999-426282, filed on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed on 11 Jun 1999, GRANTED, Pat. No. US 6146876
Continuation-in-part of Ser. No. US 2000-724599, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No.

(10)

US 2001-833082, filed on 10 Apr 2001, ABANDONED

NUMBER	DATE					

PRIORITY INFORMATION:

US 2001-335044P 20011031 (60) US 2000-254037P 20001207 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Millennium Pharmaceuticals, Inc., 75 Sidney Street,

Cambridge, MA, 02139

NUMBER OF CLAIMS:

18

EXEMPLARY CLAIM:

LINE COUNT:

25349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 4 OF 9 USPATFULL on STN

Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, TI67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor The invention provides isolated nucleic acids molecules, designated AB 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, which encode transporter molecules, including sugar transporters, organic anion transporters, amino acid transporters, and phospholipid transporters. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt gene has been introduced or disrupted. The invention still further provides isolated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt polypeptides, fusion polypeptides, antigenic peptides and anti-38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt antibodies. Diagnostic and therapeutic methods utilizing

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:207317 USPATFULL

compositions of the invention are also provided.

TITLE:

Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor Curtis, Rory A.J., Framingham, MA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED

INVENTOR(S):

PATENT ASSIGNEE(S):

Meyers, Rachel E., Newton, MA, UNITED STATES Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S. corporation)

PATENT INFORMATION: APPLICATION INFO .: RELATED APPLN. INFO .:

NUMBER KIND DATE ______

US 2003143675 A1 US 2002-154419 A1 20030731 20020522 (10)Continuation-in-part of Ser. No. US 2001-858194, filed on 14 May 2001, PENDING Continuation-in-part of Ser. No. US 2001-895811, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-919781, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-957664, filed on 19 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-964295, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-972724, filed on 5 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-2769, filed on 14 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-24623, filed on 17 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2002-55025, filed on 22 Jan 2002, PENDING

NUMBER DATE _____ US 2000-204211P 20000512 (60) PRIORITY INFORMATION: 20000629 (60) US 2000-215376P US 2000-221769P 20000731 (60) US 2000-233790P 20000919 (60) US 2000-235107P 20000925 (60) 20001005 (60) US 2000-238336P 20001114 (60) US 2000-248364P 20001115 (60) US 2000-248878P 20001215 (60) US 2000-256240P US 2000-256588P 20001218 (60) US 2000-258028P 20001221 (60) 20010122 (60) US 2001-263169P US 2001-263169P 20010122 (60) Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Intellectual Property Group, MILLENNIUM

PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,

02139

NUMBER OF CLAIMS:

23 1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

252 Drawing Page(s)

LINE COUNT:

45817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 5 OF 9 USPATFULL on STN

TI 68723, sodium/glucose cotransporter family members and uses therefor
The invention provides isolated nucleic acids molecules, designated
68723 nucleic acid molecules, which encode novel sodium/glucose
cotransporter family members. The invention also provides antisense
nucleic acid molecules, recombinant expression vectors containing 68723
nucleic acid molecules, host cells into which the expression vectors
have been introduced, and nonhuman transgenic animals in which a 68723
gene has been introduced or disrupted. The invention still further
provides isolated 68723 proteins, fusion proteins, antigenic peptides
and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:78533 USPATFULL

TITLE:

68723, sodium/glucose cotransporter family members and

uses therefor

compositions of the invention are also provided.

INVENTOR(S):

Curtis, Rory A.J., Framingham, MA, UNITED STATES

Chen, Hong, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER	KIND	DATE
US 2003054453	A1	20030320

PATENT INFORMATION: APPLICATION INFO.:

US 2002-119988 A1 20020410 (10)

NUMBER DATE

PRIORITY INFORMATION:

US 2001-282764P

20010410 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75

Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

43 1

NUMBER OF DRAWINGS:

3 Drawing Page(s)

LINE COUNT:

6315

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 6 OF 9 USPATFULL on STN

18607, a novel human calcium channel TI

The invention provides isolated nucleic acids molecules, designated TLCC AB nucleic acid molecules, which encode novel TRP-like calcium channel molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing TLCC nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a TLCC gene has been introduced or disrupted. The invention still further provides isolated TLCC proteins, fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:258807 USPATFULL

TITLE:

18607, a novel human calcium channel

INVENTOR(S):

Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Curtis, Rory A.J., Southborough, MA, UNITED STATES

Lora, Jose M., Arlington, MA, UNITED STATES

KIND NUMBER DATE US 2002142377 A1 20021003 US 2001-789481 A1 20010220

PATENT INFORMATION:

APPLICATION INFO.:

20010220 (9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No.

US 2000-583373, filed on 31 May 2000, PENDING

Continuation-in-part of Ser. No. US 2000-510706, filed

on 22 Feb 2000, PENDING

DOCUMENT TYPE:

Utility

FILE SEGMENT: LEGAL REPRESENTATIVE: APPLICATION LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS:

44

EXEMPLARY CLAIM:

1 26 Drawing Page(s)

NUMBER OF DRAWINGS: LINE COUNT:

5230

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 7 OF 9 USPATFULL on STN

25869, a novel human carboxylesterase and uses thereof TI

The invention provides isolated nucleic acid molecules, designated COE-1 AB nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antiquenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:148643 USPATFULL

TITLE: INVENTOR(S): 25869, a novel human carboxylesterase and uses thereof Curtis, Rory A.J., Southborough, MA, UNITED STATES Logan, Thomas Joseph, Needham, MA, UNITED STATES

	NUMBER	KIND	DATE	
•				
PATENT INFORMATION: U	JS 2002076786	A1	20020620	
APPLICATION INFO.: U	JS 2001-895860	A1	20010629	(9)

NUMBER DATE _____

PRIORITY INFORMATION:

US 2000-215370P 20000629 (60)

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

NUMBER OF DRAWINGS:

9 Drawing Page(s)

LINE COUNT:

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L14 ANSWER 8 OF 9 USPATFULL on STN

Non-genetic based protein disease markers ΤI

Protein disease markers for obesity, osteoporosis, diabetes, AB osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:141506 USPATFULL

TITLE:

Non-genetic based protein disease

markers

INVENTOR(S):

Myers, Timothy G., Kensington, MD, UNITED STATES Pieper, Rembert, Washington, DC, UNITED STATES Taylor, John, JR., Clayton, NC, UNITED STATES Steiner, Sandra, Gaithersburg, MD, UNITED STATES Anderson, N. Leigh, Washington, DC, UNITED STATES

NUMBER	KIND	DATE
2002072492	A1	20020613

PATENT INFORMATION: APPLICATION INFO .:

US US 2001-886271

20010622 (9) **A1**

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-660242, filed

on 12 Sep 2000, PENDING

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300

19th Street, N.W., Washington, DC, 20036

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

55 1

NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

1425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 9 OF 9 USPATFULL on STN L14

Methods and compositions for elucidating relative protein expression ŢΙ levels in cells

The present invention relates generally to methods and compositions for AΒ the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2001:188396 USPATFULL

TITLE:

Methods and compositions for elucidating relative

protein expression levels in cells

INVENTOR(S):

Link, Charles J., Des Moines, IA, United States Seregina, Tatiana, Ames, IA, United States Vahanian, Nicholas N., Ames, IA, United States Higginbotham, James N., Ames, IA, United States

Ramsey, W. Jay, Ames, IA, United States

Powers, Bradley J., Ames, IA, United States Shulka, Sachet A., Ames, IA, United States Young, Won Bin, Ames, IA, United States

	Toung, Won Bin, A	mes, IA, United	States
	NUMBER	KIND DATE	
PATENT INFORMATION: APPLICATION INFO.:			(9)
	NUMBER		
PRIORITY INFORMATION:		20000320 (60)	
DOCUMENT TYPE: FILE SEGMENT: LEGAL REPRESENTATIVE:	Utility APPLICATION	ITE VOORHEES & SE	EASE PLC, SUITE 3200, 50309-2721
NUMBER OF CLAIMS: EXEMPLARY CLAIM: NUMBER OF DRAWINGS: LINE COUNT: CAS INDEXING IS AVAILABLE	1 23 Drawing Page(s 2290		
=> d his			
(FILE 'HOME' ENTER	ED AT 13:10:45 ON	12 MAR 2004)	
FILE 'MEDLINE, BIOS' DGENE, USPATFULL' I L1 2389 S PROTE L2 368909 S OBESI' L3 845017 S HYPER' L4 1028410 S DIABE' L5 270109 S OSTEO' L6 232226 S OSTEO' L7 218 S L1 ANI L8 0 S L1 () L9 267 S L1 ANI L10 308 S L1 ANI L11 226 S L1 ANI L12 209 S L1 ANI L13 8 S L7 ANI L14 9 S L9 ANI	ENTERED AT 13:11:1 IN MARKER TY TENSION TES ARTHRITIS POROSIS D L2 L3 D L3 D L4 D L5 D L6 D NON-GENETIC D NON-GENETIC		
=> s l10 and NON-GENETIC L15 9 L10 AND	C NON-GENETIC		
=> d l15 ti abs ibib to	t		
screen for theraper AN 2002-362307 [39] AB WO 200222165 A UPAL NOVELTY - Non-gene for obesity, osteo hypertension, are in DETAILED DESCRE	sed protein diseases is, diabetes, ost sand monitoring of utic compounds. WPIDS B: 20020621 tic based protein porosis, diabetes, new. RIPTION - Non-gener obesity, osteopolypertension, are	se markers for seoathritis and h of treatment for disease markers osteoathritis a etic based protein prosis, diabetes, new, where marke	nypertension, these diseases and to and in ers for obesity (n=34),

hypertension (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

- (1) determining a disease state of a subject suspected of having obesity, osteoporosis, **diabetes**, osteoathritis or hypertension comprising:
 - (a) obtaining a sample containing protein;
- (b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and
- (c) comparing with levels in controls from disease-free subjects/control standards;
- (2) binding reagents specific for the proteins, optionally bound to a detectable label;
- (3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, **diabetes**, osteoathritis or hypertension (and optionally being treated with pharmaceuticals);
- (4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;
- (5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;
- (6) generating an index marker for a particular physiological state comprising:
- (a) determining protein markers that differ between samples from a subject with a disease state and a control sample;
 - (b) selecting two or more of the markers;
- (c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;
- (7) index markers comprising two or more protein markers determined by (6);
- (8) cloning a gene encoding a protein marker comprising:
 - (a) determining a partial amino acid sequence of the protein;
- (b) deducing a nucleotide sequence for a gene encoding the protein; and
- (c) isolating or synthesizing a gene encoding the nucleotide sequence; and
- (9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, diabetes, osteoathritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

Dwg.0/10 ACCESSION NUMBER:

2002-362307 [39] WPIDS

DOC. NO. CPI:

C2002-102544

TITLE:

New non-genetic based protein disease

markers for obesity, osteoporosis, diabetes,

osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen

for therapeutic compounds.

DERWENT CLASS:

B04 D16

INVENTOR(S):

ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR,

J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S):

(ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I)

PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N)

LARGE SCALE PROTEOMICS CORP

COUNTRY COUNT:

PATENT INFORMATION:

PATENT	NO	KIND DATE	WEEK	LA PG
				

WO 2002022165 A1 20020321 (200239)* EN 63

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

US 2002072492 A1 20020613 (200243) AU 2001088973 A 20020326 (200251)

APPLICATION DETAILS:

PATENT NO KI	IND	APPLICATION	DATE
WO 2002022165 US 2002072492		WO 2001-US28268 US 2000-660242	20010912 20000912
AU 2001088973	Α	US 2001-886271 AU 2001-88973	20010622 20010912

FILING DETAILS:

PATENT NO	KIND	PATENT NO
AU 20010889	73 A Based on	WO 2002022165

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242 20000912

L15 ANSWER 2 OF 9 USPATFULL on STN TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated AB 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

ACCESSION NUMBER:

2004:12981 USPATFULL

TITLE:

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses

therefor

INVENTOR (S):

Curtis, Rory A. J., Ashland, MA, UNITED STATES Logan, Thomas Joseph, Springfield, PA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Meyers, Rachel E., Newton, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES Rudolph-Owen, Laura A., Medford, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES Tsai, Fong-Ying, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER	KIND	DATE

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.:

20040115 US 2004009501 Α1 US 2003-377072 Α1 20030227 (10)

Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed

on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed

on 21 Aug 2001, ABANDONED

	NUMBER	DATE
JS	2000-215370P	20000629

PRIORITY INFORMATION:

(60)US 2000-187455P 20000307 (60)20000426 (60) US 2000-199801P 20000519 (60) US 2000-205508P US 2000-213688P 20000623 (60) 20000717 (60) US 2000-218675P US 2000-250932P 20001130 (60) US 2000-226504P 20000821 (60) Utility

DOCUMENT TYPE:

APPLICATION

FILE SEGMENT: LEGAL REPRESENTATIVE:

Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

19

LINE COUNT:

16123

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 3 OF 9 USPATFULL on STN Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and TТ uses therefor

The invention provides isolated nucleic acids molecules, designated AB 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or disrupted. The invention still further provides isolated 27875, 22025, 27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218

antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 2004:7776 USPATFULL ACCESSION NUMBER:

Novel 27875, 22025 ,27420, 17906, 16319, 55092 and TITLE:

10218 molecules and uses therefor

Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED INVENTOR(S):

STATES

White, David, Braintree, MA, UNITED STATES Robison, Keith E., Wilmington, MA, UNITED STATES

MacBeth, Kyle J., Boston, MA, UNITED STATES Carroll, Joseph M., Cambridge, MA, UNITED STATES Cook, William James, Hanover, NH, UNITED STATES Meyers, Rachel E., Newton, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES

Millennium Pharmaceuticals, Inc. (U.S. corporation) PATENT ASSIGNEE(S):

> NUMBER KIND DATE ______

PATENT INFORMATION: APPLICATION INFO.: RELATED APPLN. INFO.: US 2004006016 A1 US 2003-386414 A1 20040108 20030311 (10)

Continuation-in-part of Ser. No. US 1999-426282, filed on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed

on 11 Jun 1999, GRANTED, Pat. No. US 6146876

Continuation-in-part of Ser. No. US 2000-724599, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No.

US 2001-833082, filed on 10 Apr 2001, ABANDONED

DATE NUMBER _______

PRIORITY INFORMATION:

US 2001-335044P 20011031 (60) US 2000-254037P 20001207 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: Millennium Pharmaceuticals, Inc., 75 Sidney Street,

Cambridge, MA, 02139

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

18 1

LINE COUNT: 25349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ANSWER 4 OF 9 USPATFULL on STN

Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, TΙ 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated AB 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, which encode transporter molecules, including sugar transporters, organic anion transporters, amino acid transporters, and phospholipid transporters. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099,

46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt nucleic acid molecules, host cells into which the expression vectors have been introduced, and non-human transgenic animals in which a 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt gene has been introduced or disrupted. The invention still further provides isolated 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt polypeptides, fusion polypeptides, antigenic peptides and anti-38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:207317 USPATFULL

TITLE:

Novel 38594, 57312, 53659, 57250, 63760, 49938, 32146, 57259, 67118, 67067, 62092, 8099, 46455, 54414, 53763, 67076, 67102, 44181, 67084FL, 67084ALT, FBH58295FL, 57255, and 57255alt molecules and uses therefor Curtis, Rory A.J., Framingham, MA, UNITED STATES

INVENTOR(S):

Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES

Meyers, Rachel E., Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc., Cambridge, MA (U.S.

corporation)

NUMBER

PATENT INFORMATION: APPLICATION INFO .: RELATED APPLN. INFO .:

KIND DATE

US 2003143675 A1 20030731 US 2002-154419 A1 20020522 (10) Continuation-in-part of Ser. No. US 2001-858194, filed on 14 May 2001, PENDING Continuation-in-part of Ser. No. US 2001-895811, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2001-919781, filed on 31 Jul 2001, PENDING Continuation-in-part of Ser. No. US 2001-957664, filed on 19 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-964295, filed on 25 Sep 2001, PENDING Continuation-in-part of Ser. No. US 2001-972724, filed on 5 Oct 2001, PENDING Continuation-in-part of Ser. No. US 2001-2769, filed on 14 Nov 2001, PENDING Continuation-in-part of Ser. No. US 2001-24623, filed on 17 Dec 2001, PENDING Continuation-in-part of Ser. No. US 2002-55025, filed

on 22 Jan 2002, PENDING

			NUMBER	DATE	
PRIORITY	INFORMATION:	US	2000-204211P	20000512	(60)
		US	2000-215376P	20000629	(60)
		US	2000-221769P	20000731	(60)
		US	2000-233790P	20000919	(60)
		US	2000-235107P	20000925	(60)
		US	2000-238336P	20001005	(60)
		US	2000-248364P	20001114	(60)
		US	2000-248878P	20001115	(60)
		US	2000-256240P	20001215	(60)
		US	2000-256588P	20001218	(60)
		US	2000-258028P	20001221	(60)
		US	2001-263169P	20010122	(60)
		US	2001-263169P	20010122	(60)
DOCUMENT	TYPE:	Uti	ility		

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Intellectual Property Group, MILLENNIUM

PHARMACEUTICALS, INC., 75 Sidney Street, Cambridge, MA,

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

23

NUMBER OF DRAWINGS:

252 Drawing Page(s)

LINE COUNT:

45817

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 5 OF 9 USPATFULL on STN

68723, sodium/glucose cotransporter family members and uses therefor TIThe invention provides isolated nucleic acids molecules, designated AΒ 68723 nucleic acid molecules, which encode novel sodium/glucose cotransporter family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 68723 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 68723 gene has been introduced or disrupted. The invention still further provides isolated 68723 proteins, fusion proteins, antigenic peptides and anti-68723 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2003:78533 USPATFULL

TITLE:

68723, sodium/glucose cotransporter family members and

uses therefor

INVENTOR(S):

Curtis, Rory A.J., Framingham, MA, UNITED STATES

Chen, Hong, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

NUMBER KIND DATE

PATENT INFORMATION:
APPLICATION INFO.:

US 2003054453 A1 20030320 US 2002-119988 A1 20020410 (10)

APPLICATION INFO.:

NUMBER DATE ______ US 2001-282764P 20010410 (60)

PRIORITY INFORMATION:

Utility

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: Jean M. Silveri, MILLENNIUM PHARMACEUTICALS, INC., 75

Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS: 43

EXEMPLARY CLAIM: 1 NUMBER OF DRAWINGS:

3 Drawing Page(s)

LINE COUNT:

6315

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 6 OF 9 USPATFULL on STN

18607, a novel human calcium channel TI

The invention provides isolated nucleic acids molecules, designated TLCC AΒ nucleic acid molecules, which encode novel TRP-like calcium channel molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing TLCC nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a TLCC gene has been introduced or disrupted. The invention still further provides isolated TLCC proteins, fusion proteins, antigenic peptides and anti-TLCC antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:258807 USPATFULL

TITLE:

18607, a novel human calcium channel

INVENTOR(S):

Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Curtis, Rory A.J., Southborough, MA, UNITED STATES

Lora, Jose M., Arlington, MA, UNITED STATES

NUMBER KIND DATE _____

PATENT INFORMATION:

US 2002142377 A1 20021003 US 2001-789481 A1 20010220 (9)

APPLICATION INFO.: RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-634669, filed on 8 Aug 2000, PENDING Continuation-in-part of Ser. No.

US 2000-583373, filed on 31 May 2000, PENDING

Continuation-in-part of Ser. No. US 2000-510706, filed

on 22 Feb 2000, PENDING

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS: 44 EXEMPLARY CLAIM:

1

NUMBER OF DRAWINGS:

26 Drawing Page(s)

LINE COUNT:

5230

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 7 OF 9 USPATFULL on STN

25869, a novel human carboxylesterase and uses thereof TI

The invention provides isolated nucleic acid molecules, designated COE-1 AΒ nucleic acid molecules, which encode novel carboxylesterase family members. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing COE-1 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a COE-1 gene has been introduced or disrupted. The invention still further provides isolated COE-1 proteins, fusion proteins, antigenic peptides and anti-COE-1 antibodies. Diagnostic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

INVENTOR(S):

ACCESSION NUMBER: 2002:148643 USPATFULL

TITLE:

25869, a novel human carboxylesterase and uses thereof Curtis, Rory A.J., Southborough, MA, UNITED STATES

Logan, Thomas Joseph, Needham, MA, UNITED STATES

DATE

DATE NUMBER KIND US 2002076786 A1 20020620 US 2001-895860 A1 20010629 (9)

PATENT INFORMATION: APPLICATION INFO.:

NUMBER

PRIORITY INFORMATION:

_____ US 2000-215370P 20000629 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE: LAHIVE & COCKFIELD, 28 STATE STREET, BOSTON, MA, 02109

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

9 Drawing Page(s)

NUMBER OF DRAWINGS: LINE COUNT:

5139

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 8 OF 9 USPATFULL on STN

тT Non-genetic based protein disease markers

Protein disease markers for obesity, osteoporosis, diabetes, AΒ osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:141506 USPATFULL

TITLE:

Non-genetic based protein disease

markers

INVENTOR(S):

Myers, Timothy G., Kensington, MD, UNITED STATES Pieper, Rembert, Washington, DC, UNITED STATES Taylor, John, JR., Clayton, NC, UNITED STATES Steiner, Sandra, Gaithersburg, MD, UNITED STATES Anderson, N. Leigh, Washington, DC, UNITED STATES

		NUMBER	KIND	DATE	
٠	INFORMATION:	US 2002072492	A1	20020613	

PATENT APPLICATION INFO.:

20010622 US 2001-886271 Α1 (9)

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2000-660242, filed

on 12 Sep 2000, PENDING

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300

19th Street, N.W., Washington, DC, 20036

NUMBER OF CLAIMS:

1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

1425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L15 ANSWER 9 OF 9 USPATFULL on STN

Methods and compositions for elucidating relative protein expression ΤI levels in cells

The present invention relates generally to methods and compositions for AB the identification of differential protein expression patterns and concomitantly the active genetic regions that are directly or indirectly involved in different tissue types, disease states, or other cellular differences desirable for diagnosis or for targets for drug therapy.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2001:188396 USPATFULL

TITLE:

Methods and compositions for elucidating relative

protein expression levels in cells

INVENTOR(S):

Link, Charles J., Des Moines, IA, United States Seregina, Tatiana, Ames, IA, United States Vahanian, Nicholas N., Ames, IA, United States Higginbotham, James N., Ames, IA, United States Ramsey, W. Jay, Ames, IA, United States

Powers, Bradley J., Ames, IA, United States Shulka, Sachet A., Ames, IA, United States Young, Won Bin, Ames, IA, United States

	NUMBER	KIND	DATE	
		-		
PATENT INFORMATION:	US 2001034028	A1	20011025	
APPLICATION INFO.:	US 2001-811842	A1	20010319	(9)

NUMBER	DATE

US 2000-190678P 20000320 (60) PRIORITY INFORMATION: US 2000-198722P 20000420 (60)

DOCUMENT TYPE: Utility APPLICATION FILE SEGMENT:

ZARLEY MCKEE THOMTE VOORHEES & SEASE PLC, SUITE 3200, LEGAL REPRESENTATIVE:

801 GRAND AVENUE, DES MOINES, IA, 50309-2721

52 NUMBER OF CLAIMS: EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 23 Drawing Page(s)

LINE COUNT: 2290

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE, DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

1.1 2389 S PROTEIN MARKER 368909 S OBESITY L_2 T₃ 845017 S HYPERTENSION 1028410 S DIABETES T.4 270109 S OSTEOARTHRITIS 1.5 1.6 232226 S OSTEOPOROSIS L7 218 S L1 AND L2 0 S L1 () L3 T.8 267 S L1 AND L3 L9308 S L1 AND L4 L10 L11 226 S L1 AND L5 209 S L1 AND L6 L12 8 S L7 AND NON-GENETIC T.13 9 S L9 AND NON-GENETIC L149 S L10 AND NON-GENETIC L15

=> s lll and NON-GENETIC

2 L11 AND NON-GENETIC

=> d l16 ti abs ibib tot

L16 ANSWER 1 OF 2 USPATFULL on STN TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2004:12981 USPATFULL

TITLE:

AB

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses

therefor

INVENTOR (S):

Curtis, Rory A. J., Ashland, MA, UNITED STATES Logan, Thomas Joseph, Springfield, PA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED STATES

Meyers, Rachel E., Newton, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES Rudolph-Owen, Laura A., Medford, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES Tsai, Fong-Ying, Newton, MA, UNITED STATES

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004009501	A1	20040115
APPLICATION INFO.:	US 2003-377072	A1	20030227

RELATED APPLN. INFO.:

Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed on 25 Apr 2001, GRANTED, Pat. No. US 6569667 Continuation-in-part of Ser. No. US 2001-861801, filed cap 21 May 2001, ARANDONED Continuation in part of Ser.

(10)

on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed

on 21 Aug 2001, ABANDONED

	NUMBER	DATE			
PRIORITY INFORMATION:	US 2000-215370P	20000629	(60)		
	US 2000-187455P	20000307	(60)		
	US 2000-199801P	20000426	(60)		
	US 2000-205508P	20000519	(60)		
	US 2000-213688P	20000623	(60)		
	US 2000-218675P	20000717	(60)		
	US 2000-250932P	20001130	(60)		
	US 2000-226504P	20000821	(60)		
DOCUMENT TYPE:	Utility				
FILE SEGMENT:	APPLICATION				
LEGAL REPRESENTATIVE:	Jean M. Silveri,	75 Sidney S	Street,	Cambridge,	MA, 02139
NUMBER OF CLAIMS:	19	ט			
EXEMPLARY CLAIM:	1				

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L16 ANSWER 2 OF 2 USPATFULL on STN

LINE COUNT:

TI Non-genetic based protein disease markers

AB Protein disease markers for obesity, osteoporosis, diabetes, osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER: 2002:141506 USPATFULL

TITLE: Non-genetic based protein disease

markers

INVENTOR(S): Myers, Timothy G., Kensington, MD, UNITED STATES

Pieper, Rembert, Washington, DC, UNITED STATES Taylor, John, JR., Clayton, NC, UNITED STATES Steiner, Sandra, Gaithersburg, MD, UNITED STATES Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE		
PATENT INFORMATION:	US 2002072492	A1	20020613		
APPLICATION INFO.:	US 2001-886271	A1	20010622	(9)	
RELATED APPLN. INFO.:	Continuation-in-p	art of	Ser. No.	US 2000-660242,	filed

```
on 12 Sep 2000, PENDING
```

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300

19th Street, N.W., Washington, DC, 20036

NUMBER OF CLAIMS:

EXEMPLARY CLAIM:

55 1

NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

1425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

=> d his

L3

1.6

(FILE 'HOME' ENTERED AT 13:10:45 ON 12 MAR 2004)

FILE 'MEDLINE, BIOSIS, BIOBUSINESS, WPIDS, FSTA, JICST-EPLUS, EMBASE, DGENE, USPATFULL' ENTERED AT 13:11:13 ON 12 MAR 2004

L1 2389 S PROTEIN MARKER

L2 368909 S OBESITY

845017 S HYPERTENSION

L4 1028410 S DIABETES

L5 270109 S OSTEOARTHRITIS

232226 S OSTEOPOROSIS

L7 218 S L1 AND L2

L8 0 S L1 () L3

L9 267 S L1 AND L3

L10 308 S L1 AND L4

L11 226 S L1 AND L5

L12 209 S L1 AND L6

L13 8 S L7 AND NON-GENETIC

L14 9 S L9 AND NON-GENETIC

L15 9 S L10 AND NON-GENETIC

L16 2 S L11 AND NON-GENETIC

=> s l12 and NON-GENETIC

L17 4 L12 AND NON-GENETIC

=> d l17 ti abs ibib tot

L17 ANSWER 1 OF 4 WPIDS COPYRIGHT 2004 THOMSON DERWENT on STN

TI New non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen for therapeutic compounds.

AN 2002-362307 [39] WPIDS

AB WO 200222165 A UPAB: 20020621

NOVELTY - **Non-genetic** based protein disease markers for obesity, **osteoporosis**, diabetes, osteoathritis and hypertension, are new.

DETAILED DESCRIPTION - Non-genetic based protein disease markers for obesity, osteoporosis, diabetes, osteoathritis and hypertension, are new, where markers for obesity (n=34), osteoporosis (n=20), diabetes (n=9), osteoathritis (n=1) and hypertension (n=9) are listed in the specification.

INDEPENDENT CLAIMS are also included for the following:

- (1) determining a disease state of a subject suspected of having obesity, osteoporosis, diabetes, osteoathritis or hypertension comprising:
 - (a) obtaining a sample containing protein;
- (b) measuring levels of protein markers of the disease state, where the markers are given in the specification; and
- (c) comparing with levels in controls from disease-free subjects/control standards;

- (2) binding reagents specific for the proteins, optionally bound to a detectable label;
- (3) a standardized two-dimensional electrophoretic protein distribution from a sample (optionally human serum) from a subject having obesity, osteoporosis, diabetes, osteoathritis or hypertension (and optionally being treated with pharmaceuticals);
- (4) protein markers comprising a composition of two or more proteins which individually do not have significantly different levels between disease/control samples in a method as in (1), but produce a combined value which is significantly different, and methods and binding reagents as in (1) and (2) relating to the markers;
- (5) protein submarkers not altered statistically significantly in the method as in (1) but altered in tandem/opposite in level and direction to protein markers, and methods and binding reagents as in (1) and (2) relating to the markers;
- (6) generating an index marker for a particular physiological state comprising:
- (a) determining protein markers that differ between samples from a subject with a disease state and a control sample;
 - (b) selecting two or more of the markers;
- (c) combining the values for the markers and determining where the combination of values is altered in a manner of greater statistical significance;
- (7) index markers comprising two or more protein markers determined by (6);
- (8) cloning a gene encoding a **protein marker** comprising:
 - (a) determining a partial amino acid sequence of the protein;
- (b) deducing a nucleotide sequence for a gene encoding the protein; and
- (c) isolating or synthesizing a gene encoding the nucleotide sequence; and
- (9) polynucleotides encoding the proteins, and antisense sequences inhibiting gene expression.

ACTIVITY - Anorectic; osteopathic; antidiabetic; antiarthritic; hypotensive. No biological data is given.

MECHANISM OF ACTION - None given.

USE - The markers and a new method are useful to diagnose obesity, osteoporosis, diabetes, osteoathritis or hypertension in individuals. Marker levels may also be used to determine disease severity. The markers and method can also be used to monitor the efficacy of therapy for the conditions, by comparing marker levels between samples from a subject taken at different times. The markers identified may also be drug development targets for the diseases. The protein markers can be used to screen compounds for biological activity against the diseases, which may be included with a carrier in pharmaceutical compositions useful to treat the disease states. The markers are useful to screen candidate compounds for detection of or therapeutic activity against disease states, and to identify biological pathways involved in disease states. They are also useful to identify synergistic agents which may be included in pharmaceutical compositions (all claimed).

ACCESSION NUMBER:

2002-362307 [39] WPIDS

DOC. NO. CPI:

C2002-102544

TITLE:

New non-genetic based protein disease

markers for obesity, osteoporosis, diabetes,

osteoathritis and hypertension, useful in diagnosis and monitoring of treatment for these diseases and to screen

for therapeutic compounds. B04 D16

DERWENT CLASS:

INVENTOR(S):

ANDERSON, N L; MYERS, T G; PIEPER, R; STEINER, S; TAYLOR,

J; MYERS, T; REMBERT, P

PATENT ASSIGNEE(S):

(ANDE-I) ANDERSON N L; (MYER-I) MYERS T G; (PIEP-I)

PIEPER R; (STEI-I) STEINER S; (TAYL-I) TAYLOR J; (LARG-N)

COUNTRY COUNT:

PATENT INFORMATION:

PATENT NO KIND DATE WEEK LA PG

WO 2002022165 A1 20020321 (200239) * EN 63

RW: AT BE CH CY DE DK EA ES FI FR GB GH GM GR IE IT KE LS LU MC MW MZ

NL OA PT SD SE SL SZ TR TZ UG ZW

W: AE AG AL AM AT AU AZ BA BB BG BR BY BZ CA CH CN CO CR CU CZ DE DK DM DZ EC EE ES FI GB GD GE GH GM HR HU ID IL IN IS JP KE KG KP KR KZ LC LK LR LS LT LU LV MA MD MG MK MN MW MX MZ NO NZ PH PL PT RO

RU SD SE SG SI SK SL TJ TM TR TT TZ UA UG US UZ VN YU ZA ZW

US 2002072492 A1 20020613 (200243) AU 2001088973 A 20020326 (200251)

APPLICATION DETAILS:

PATENT NO KIND	APPLICATION	DATE
WO 2002022165 A1 US 2002072492 A1 CIP of	WO 2001-US28268 US 2000-660242	20010912 20000912
AU 2001088973 A	US 2001-886271 AU 2001-88973	20010622 20010912

FILING DETAILS:

PRIORITY APPLN. INFO: US 2001-886271 20010622; US 2000-660242 20000912

L17 ANSWER 2 OF 4 USPATFULL on STN

TI Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses therefor

The invention provides isolated nucleic acids molecules, designated AΒ 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 gene has been introduced or disrupted. The invention still further provides isolated 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 proteins, fusion proteins, antigenic peptides and anti-25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 or 49933 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2004:12981 USPATFULL

TITLE:

Novel 25869, 25934, 26335, 50365, 21117, 38692, 46508, 16816, 16839, 49937, 49931 and 49933 molecules and uses

therefor

INVENTOR(S):

Curtis, Rory A. J., Ashland, MA, UNITED STATES Logan, Thomas Joseph, Springfield, PA, UNITED STATES Glucksmann, Maria Alexandra, Lexington, MA, UNITED

Meyers, Rachel E., Newton, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES

Rudolph-Owen, Laura A., Medford, MA, UNITED STATES

Chun, Miyoung, Belmont, MA, UNITED STATES Tsai, Fong-Ying, Newton, MA, UNITED STATES

ZZMD

PATENT ASSIGNEE(S):

Millennium Pharmaceuticals, Inc. (U.S. corporation)

	NUMBER	KIND	DAIL
			-
MACHTON.	TTC 2004000E01	7\1	20040115

PATENT INFORMATION: APPLICATION INFO .: RELATED APPLN. INFO.:

US 2004009501 20040115 A1 A1 20030227 (10) US 2003-377072

Continuation-in-part of Ser. No. US 2001-895860, filed on 29 Jun 2001, PENDING Continuation-in-part of Ser. No. US 2000-723806, filed on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-843297, filed

on 25 Apr 2001, GRANTED, Pat. No. US 6569667

Continuation-in-part of Ser. No. US 2001-861801, filed on 21 May 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-816494, filed on 23 Mar 2001, PENDING Continuation-in-part of Ser. No. US 2001-888911, filed on 25 Jun 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-908664, filed on 17 Jul 2001, ABANDONED Continuation-in-part of Ser. No. US 2001-935291, filed

on 21 Aug 2001, ABANDONED

			NUMBER	DATE	
PRIORITY IN	FORMATION:	US	2000-215370P	20000629	(60)
		US	2000-187455P	20000307	(60)
		US	2000-199801P	20000426	(60)
		US	2000-205508P	20000519	(60)
		US	2000-213688P	20000623	(60)
		US	2000-218675P	20000717	(60)
		US	2000-250932P	20001130	(60)
		US	2000-226504P	20000821	(60)
DOCUMENT TY	PE:	Uti	ility		

DOCUMENT TYPE: FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Jean M. Silveri, 75 Sidney Street, Cambridge, MA, 02139

NUMBER OF CLAIMS: 19 EXEMPLARY CLAIM: LINE COUNT: 16123

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17

ANSWER 3 OF 4 USPATFULL on STN Novel 27875, 22025 ,27420, 17906, 16319, 55092 and 10218 molecules and TIuses therefor

The invention provides isolated nucleic acids molecules, designated AΒ 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules. The invention also provides antisense nucleic acid molecules, recombinant expression vectors containing 27875, 22025, 27420, 16319, 55092 and 10218 nucleic acid molecules, host cells into which the expression vectors have been introduced, and nonhuman transgenic animals in which a 27875, 22025, 27420, 16319, 55092 and 10218 gene has been introduced or disrupted. The invention still further provides isolated 27875, 22025, 27420, 17906, 16319, 55092 or 10218 proteins, fusion proteins, antigenic peptides and anti-27875, 22025, 27420, 17906, 16319, 55092 or 10218 antibodies. Diagnostic and therapeutic methods utilizing compositions of the invention are also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT. 2004:7776 USPATFULL ACCESSION NUMBER:

Novel 27875, 22025 ,27420, 17906, 16319, 55092 and TITLE:

10218 molecules and uses therefor

Kapeller-Libermann, Rosana, Chestnut Hill, MA, UNITED INVENTOR(S):

STATES

White, David, Braintree, MA, UNITED STATES

Robison, Keith E., Wilmington, MA, UNITED STATES MacBeth, Kyle J., Boston, MA, UNITED STATES Carroll, Joseph M., Cambridge, MA, UNITED STATES Cook, William James, Hanover, NH, UNITED STATES Meyers, Rachel E., Newton, MA, UNITED STATES Chun, Miyoung, Belmont, MA, UNITED STATES Williamson, Mark J., Saugus, MA, UNITED STATES Millennium Pharmaceuticals, Inc. (U.S. corporation)

PATENT ASSIGNEE(S):

KIND DATE NUMBER ______

PATENT INFORMATION: APPLICATION INFO .: RELATED APPLN. INFO.: US 2004006016 A1 20040108 US 2003-386414 A1 20030311

(10) Continuation-in-part of Ser. No. US 1999-426282, filed

on 25 Oct 1999, ABANDONED Continuation-in-part of Ser. No. US 2000-668266, filed on 22 Sep 2000, ABANDONED Continuation-in-part of Ser. No. US 1999-330970, filed on 11 Jun 1999, GRANTED, Pat. No. US 6146876 Continuation-in-part of Ser. No. US 2000-724599, filed

on 28 Nov 2000, PENDING Continuation-in-part of Ser. No. US 2001-860193, filed on 16 May 2001, PENDING Continuation-in-part of Ser. No. US 2000-571689, filed on 16 May 2000, ABANDONED Continuation-in-part of Ser. No. US 2002-283023, filed on 29 Oct 2002, PENDING Continuation-in-part of Ser. No. US 2001-10943, filed on 6 Dec 2001, PENDING Continuation-in-part of Ser. No.

US 2001-833082, filed on 10 Apr 2001, ABANDONED

NUMBER DATE

PRIORITY INFORMATION:

US 2001-335044P 20011031 (60)

DOCUMENT TYPE: FILE SEGMENT:

Utility APPLICATION

LEGAL REPRESENTATIVE:

Millennium Pharmaceuticals, Inc., 75 Sidney Street,

Cambridge, MA, 02139

NUMBER OF CLAIMS: EXEMPLARY CLAIM:

18 1

LINE COUNT:

25349

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

L17 ANSWER 4 OF 4 USPATFULL on STN

Non-genetic based protein disease markers TI

Protein disease markers for obesity, osteoporosis, diabetes, AΒ osteoarthritis and hypertension are disclosed. These markers are not inherited or of genetic origin as they were not found in identical twins of the affected individual. Methods and uses for diagnostic, therapeutic and drug discovery are disclosed.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

ACCESSION NUMBER:

2002:141506 USPATFULL

TITLE:

Non-genetic based protein disease

markers

INVENTOR(S):

Myers, Timothy G., Kensington, MD, UNITED STATES Pieper, Rembert, Washington, DC, UNITED STATES Taylor, John, JR., Clayton, NC, UNITED STATES Steiner, Sandra, Gaithersburg, MD, UNITED STATES Anderson, N. Leigh, Washington, DC, UNITED STATES

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2002072492	A1	20020613	
APPLICATION INFO.:	US 2001-886271	A1	20010622	(:

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-660242, filed

on 12 Sep 2000, PENDING

DOCUMENT TYPE:

Utility

FILE SEGMENT:

APPLICATION

LEGAL REPRESENTATIVE:

Dean H. Nakamura, Roylance Abrams Berdo & Goodman, 1300

19th Street, N.W., Washington, DC, 20036

NUMBER OF CLAIMS:

1

EXEMPLARY CLAIM: NUMBER OF DRAWINGS:

10 Drawing Page(s)

LINE COUNT:

1425

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

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Werner P., Arnaud P.;
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apolipoprotein H (beta 2-glycoprotein I)
clin. Lab. Res. 21:256-263(1992)
MEDLINE=22386257; PubMed=12477932;
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Klausner R.D., Collins F.S., Wagner L., Shenmen C.M., Schuler G.
Altschul S.F., Zeeberg B., Buetow K.H., Schaefer C.F., Bhat N.K.
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                                                                               SEQUENCE FROM
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                                                                                                                                                             SEQUENCE FROM N.A. MEDLINE=99115472;
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                                                                                                                                                                                                                                                                                                                                                                                                       "Nucleotide sequence and expression of apolipoprotein H (beta 2-glycoprotein H)
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"Molecular cloning and mammalian expression of human beta 2-glycoprotein I cDNA.";
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Steinkasserer A., Estaller C., Weiss
"Complete nucleotide and deduced amir
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Mammalia; Eutheria;
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01-JUN-1994 (Rel. 29,
10-OCT-2003 (Rel. 42,
10-CT-29lycoprotein I
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Rasmussen T.E., Sanghera D.K., Fof the human beta2-glycoprotein
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(Rel. 42, Last annotation update)
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Bouma B., de Groot P.G., van Den Elsen J.M.H., Ravelli R.B.G.,
Bouma B., simmelink M.J.A., Derksen R.H.W.M., Kroon J., Gros P.;
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SEQUENCE OF 20-345, CARDUMEDLINE=84222015; PubMed=6587378;
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                                           VARIANT ASN-107.
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MEDLINE=97299942; Pubmed=9155091;
Gambino R., Ruiu G., Pagano G., Cassader Mediative analysis of the carbohydrate
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PubMed=10562535;
                                           PubMed=9225969;
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                                                                                                                                                                                                                        man beta2-glycoprotein I: implications the antiphospholipid syndrome.";
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2-glycoprotein
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polymorphism

2-glycoprotein

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We Heparin-binding; Glycoprotein; Plasma; Repeat; Sushi; Signal; GW Polymorphism; 3D-structure.

1 19
CHAIN 1 20 345
PT CHAIN 20 345
PT DOMAIN 22 80 SUSHI 1.

POMAIN 23 80 SUSHI 2.

POMAIN 241 201 SUSHI 3.

POMAIN 264 261 SUSHI 4.

POMAIN 263 345
PT DOMAIN 264 261 SUSHI 4.

PT DISULFID 23 66
PT DISULFID 23 66
PT DISULFID 84 124
PT DISULFID 110 137
PT DISULFID 142 188
PT DISULFID 142 188
PT DISULFID 205 248
PT DISULFID 205 248
PT DISULFID 264 315
PT DISULFID 300 325
PT CARBOHYD 162 162 N-LINKED (GLCNAC...).

PT CARBOHYD 183 183 N-LINKED (GLCNAC...).
                                                                                                                                                                                                                                                                                                                                                                    EMBL; X58100; CAA41113.1; -.

EMBL; X53595; CAA37664.1; -.

EMBL; X53595; CAA40977.1; -.

EMBL; M62839; AAA51766.1; -.

EMBL; S80305; AAB21330.1; -.

EMBL; Y11493; CAA72279.1; JOINED.

EMBL; Y11494; CAA72279.1; JOINED.

EMBL; Y11495; CAA72279.1; JOINED.

EMBL; X11495; CAA72279.1; JOINED.

EMBL; X11496; CAA72279.1; JOINED.

EMBL; X11497; CAA72279.1; JOINED.

EMBL; Y11497; CAA72279.1; JOINED.

EMBL; Y11498; CAA72279.1; JOINED.

EMBL; Y11498; CAA72279.1; JOINED.

EMBL; Y11498; CAA72279.1; JOINED.

EMBL; Y11498; CAA72279.1; JOINED.

EMBL; BC020703; AAH26783.1; -.

EMBL; BC026283; AAH26283.1; -.
                                                                                                                                                                                                                                                                                                                PIR; S17178; NBHU.
PDB; 1QUB; 08-OCT-99.
PDB; 1CLT; 19-NOV-99.
PDB; 1G4F; 28-MAR-01.
PDB; 1G4G; 28-MAR-01.
                                                                                                                                                                                                                                                                                 Genew; HGNC:6
MIM; 138700;
InterPro; IPR
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   This SWISS-PROT entry is copyright. It is produced through a collaboration between the Swiss Institute of Bioinformatics and the EMBL outstation the European Bioinformatics Institute. There are no restrictions on its use by non-profit institutions as its content is in no way modified and this statement is not removed. Usage by and for commercial entities requires a license agreement (See http://www.isb-sib.ch/announce/or send an email to license@isb-sib.ch).
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             Hum.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 VARIANTS GLY-325 AND SER-335.

MEDLINE=97217791, PubMed=9063752;

Sanghera D.K., Wagenkhecht D.R., McIntyre J.A., Kamboh M.I.;

Sanghera D.K., Wagenkhecht D.R., McIntyre J.A., Kamboh M.I.;

"Identification of structural mutations in the fifth domain of apolipoprotein H (beta-2-glycoprotein I) which affect phospholipid binding.";
                                                                                                                                                                                                                                                          InterPro; IPR000436; Sushi_SCR_CCP Pfam; PF00084; sushi; 4.
SMART; SM00032; CCP; 4.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             + + +
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          N. Mol. Genet. 6:311-316(1997).

FUNCTION: Binds to various kinds of negatively charged substances such as heparin, phospholipids, and dextran sulfate. May prevent activation of the intrinsic blood coagulation cascade by binding to phospholipids on the surface of damaged cells.

SUBCELIULAR LOCATION: Secreted.

TISSUE SPECIFICITY: Expressed by the liver and secreted in plasma.

SIMILARITY: Contains 4 Sushi (SCR) domains.
                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              Genet.
                                                                                                                                                                                                                                                                                                       HGNC:616; APOH.
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107
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193 193 N-LINKED (GLCNAC. . .).
253 253 N-LINKED (GLCNAC. . .).
107 S - N (in allele APOH*1; dbSNP:1801692).

/FTId=VAR 008169.

266 266 V -> L (in 23% of the population;
/FTId=VAR 000673.
/FTId=VAR 000673.

25 325 C -> G (loss of phosphatidylserine-binding; dbSNP:1801689).
/FTId=VAR 008170.

335 335 W -> S (in allele APOH*3W; loss of phosphatidylserine-binding;
/FTId=VAR 008171.

121 121 C -> N (IN REF. 8).

188 C -> N (IN REF. 8).
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301	251	201	151	101	51	1	P02749	SEQU	TIRN	STRAND	TURN	STRAND	STRAND	TURN	STRAND
KNKEKKCSYT EDAQCIDGTI	LGNWSAMPSC KASCKVPVKI	REVKCPFPSR PDNGFVNYP	ATLRVYKPSA GNNSLYRDTI	EYPNTISFSC NTGFYLNGAL	CKPGYVSRGG MRKFICPLTO	MISPVLILES SELCHVAIA	Length: 345 March 17	SEQUENCE 345 AA; 38298 MW;	324 325	ND 319 319	4 317 318	AND 316 316	307 314	4 303 306	AND 295 302
KNKEKKCSYT EDAQCIDGTI EVPKCFKEHS SLAFWKTDAS DVKPC	KASCKVPVKK ATVVYQGERV KIQEKFKNGM LHGDKVSFFC	PDNGFVNYPA KPTLYYKDKA TFGCHDGYSL DGPEEIECTK	ATLRVYKPSA GNNSLYRDTA VFECLPQHAM FGNDTITCTT HGNWTKLPEC	EYPNTISFSC NTGFYLNGAD SAKCTEEGKW SPELFVCAPI ICPPPSIPTF	CKPGYVSRGG MRKFICPLTG LWPINTLKCT PRVCPFAGIL ENGAVRYTTF	MISPVLILFS SFLCHVAIAG RTCPKPDDLP FSTVVPLKTF YEPGEEITYS	March 12, 2004 11:34 Type: P	MW; 63101704F8EDFE3F CRC64;							
DVKPC	LHGDKVSFFC	DGPEEIECTK	HGNWTKLPEC	ICPPPSIPTF	ENGAVRYTTF	YEPGEEITYS	Check: 2134	CRC64;							